

THEIR HISTORY AND CULTURE

voted their attention to developing techniques for knowing and controlling the mind—in contrast with the West which has sought techniques for knowing and controlling matter. To this generalization exception can easily be taken, but it may well be that in the subjectivity of so much of Chinese philosophy, particularly after the advent of Buddhism, is to be found the secret of the arrested development in the mastery of nature.

Whatever the cause, the backwardness of the Chinese in the mathematical and the natural sciences and in mechanical devices when compared with the Western Europeans and Americans of the past century and a half is indisputable. In mathematics, astronomy, and in some mechanical appliances, indeed, China was notably behind the Europe of even the sixteenth and seventeenth centuries. Quite a literature was produced on mathematics and astronomy, but much of the knowledge which lies back of it originated in the West. This was true even before the great enrichment which came through the Jesuits in the late Ming and the early Ch'ing. Moslems were responsible for some of it and there may have been importations as early as the Chou,

However, in some phases of what may be called scientific literature there was a large output—apparently chiefly and perhaps almost entirely independent of stimulus from abroad. This was particularly marked in agriculture and medicine. Agriculture has a very extensive literature, some of it dating back as far as the T'ang. Many phases of the subject are dealt with—such as the implements utilized, fruits, vegetables, bamboo, ploughing, sowing, hydraulics, the planting of mulberry trees, the rearing of silkworms, and the breeding of cattle. The Chinese had here ac-

quired a vast amount of information and had developed many ingenious devices.

We know that medical literature existed as early as the Han, and it is probable that some was written even before that time. The *Net Ching*, said to be the oldest Chinese medical classic, is ascribed to the end of the Chou or the beginning of the Ch'in, and some other works are said to be fully as ancient. A number of extant treatises were composed by Sung physicians, a voluminous literature, including a famous materia medica, dates from the Ming, and Ch'ing physicians were prolific authors. The traditional Chinese medical lore compares favorably with